

Claims

What is claimed is:

- Sub B3 > 1. An expandable tubular assembly, comprising:
2 a pair of tubular members having threaded portions coupled to one
3 another; and
4 a quantity of a sealant within the threaded portions of the tubular
5 members.
- 1 2. The assembly of claim 1, wherein the sealant is selected from the group
2 consisting of epoxies, thermosetting sealing compounds, curable sealing
3 compounds, and sealing compounds having polymerizable materials.
- 1 3. The assembly of claim 1, wherein the sealant includes an initial cure cycle
2 and a final cure cycle.
- 1 4. The assembly of claim 1, wherein the sealant can be stretched up to about
2 30 to 40 percent without failure.
- 1 5. The assembly of claim 1, wherein the sealant is resistant to conventional
2 wellbore fluidic materials.
- 1 6. The assembly of claim 1, wherein the material properties of the sealant are
2 substantially stable for temperatures ranging from about 0 to 450 °F.
- 1 7. The assembly of claim 1, wherein the threaded portions of the tubular
2 members include a primer for improving the adhesion of the sealant to the
3 threaded portions.

1 8. A method of coupling an expandable tubular assembly including a plurality
2 of tubular members having threaded portions to a preexisting structure,
3 comprising:

4 coating the threaded portions of the tubular members with a sealant;
5 coupling the threaded portions of the tubular members;
6 curing the sealant;
7 positioning the tubular members within a preexisting structure; and
8 radially expanding the tubular members into contact with the preexisting
9 structure.

1 9. The method of claim 8, wherein the sealant is selected from the group
2 consisting of epoxies, thermosetting sealing compounds, curable sealing
3 compounds, and sealing compounds having polymerizable materials.

1 10. The method of claim 8, further including:
2 initially curing the sealant prior to radially expanding the tubular
3 members; and
 finally curing the sealant after radially expanding the tubular members.

1 11. The method of claim 8, wherein the sealant can be stretched up to about 30
2 to 40 percent after curing without failure.

1 12. The method of claim 8, wherein the sealant is resistant to conventional
2 wellbore fluidic materials.

1 13. The method of claim 8, wherein the material properties of the sealant are
2 substantially stable for temperatures ranging from about 0 to 450 °F.

1 14. The method of claim 8, further including:
2 applying a primer to the threaded portions of the tubular members prior to
3 coating the threaded portions of the tubular members with the
4 sealant.

1 15. The method of claim 14, wherein the primer includes a curing catalyst.

1 16. The method of claim 14, wherein the primer is applied to the threaded
2 portion of one of the tubular members and the sealant is applied to the threaded
3 portion of the other one of the tubular members.

1 17. The method of claim 16, wherein the primer includes a curing catalyst.

1 18. An apparatus, comprising:
2 a preexisting structure; and
3 a plurality of tubular members having threaded portions coupled to the
4 preexisting structure by the process of:
5 coating the threaded portions of the tubular members with a
6 sealant;
7 coupling the threaded portions of the tubular members;
8 curing the sealant;
9 positioning the tubular members within a preexisting structure; and
10 radially expanding the tubular members into contact with the
11 preexisting structure.

12 19. The apparatus of claim 18, wherein the sealant is selected from the group
13 consisting of epoxies, thermosetting sealing compounds, curable sealing
14 compounds, and sealing compounds having polymerizable materials.

1 20. The apparatus of claim 18, further including:
2 initially curing the sealant prior to radially expanding the tubular
3 members; and
4 finally curing the sealant after radially expanding the tubular members.

1 21. The apparatus of claim 18, wherein the sealant can be stretched up to
2 about 30 to 40 percent after curing without failure.

1 22. The apparatus of claim 18, wherein the sealant is resistant to conventional
2 wellbore fluidic materials.

1 23. The apparatus of claim 18, wherein the material properties of the sealant
2 are substantially stable for temperatures ranging from about 0 to 450 °F.

1 24. The apparatus of claim 18, further including:
2 applying a primer to the threaded portions of the tubular members prior to
3 coating the threaded portions of the tubular members with the
4 sealant.

1 25. The apparatus of claim 24, wherein the primer includes a curing catalyst.

1 26. The apparatus of claim 24, wherein the primer is applied to the threaded
2 portion of one of the tubular members and the sealant is applied to the threaded
3 portion of the other one of the tubular members.

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1 27. The apparatus of claim 26, wherein the primer includes a curing catalyst.

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